IDNR Master Matrix Technical Advisory Committee Urbandale, Iowa MEETING TWO July 10and 11, 2002

SUMMARY MINUTES

- 1.10 Welcome from Federal Mediation & Conciliation Service (FMCS)
 Introduction of Committee members, FMCS facilitators, and public attendees.
- 1.11 Committee members and FMCS facilitators present:
 - Brent Halling, Iowa Department of Agriculture
 - Robin Pruisner, IDNR
 - Dr. Mary Gilchrist, University of Iowa (Uof I)
 - John Lawrence, Iowa State University (ISU)
 - Susan Heathcote, Iowa Environmental Council
 - Harlan Hanson, Iowa State Association of Counties
 - Calvin Rozenboom, Farm Bureau
 - Aaron Heley Lehman, Iowa Farmer's Union (alternate)
 - Joe Laffoon, Iowa Poultry Association
 - John Korslund, Iowa Pork Producers Association (alternate)
 - Rosemary Hayes, FMCS
 - Scot Beckenbaugh, FMCS
 - Danny Mabe, FMCS
 - Keith Norton, FMCS
 - Dave Dorff/Dave Sheridan, Attorney General, advisor
 - Christine Spackman, IDNR, recorder
- 1.12 Public attendees:
 - Chris Gruenhagen, Iowa Farm Bureau
 - Mary Braun, Iowa House Democratic Staff
 - Sherry Timmons, Iowa Department of Economic Development
 - Wendy Walker, Iowa Department of Economic Development
 - Lew Olson, Iowa House Republican Staff
 - Liz Wagstrom, National Pork Board
 - Dwaine Bundy, ISU
 - Dale Johnson, Iowa Farm Bureau
 - Stewart Melvin, ISU
 - Kent Krause, Heartland
 - Michelle Meinecke, Iowa Farm Bureau
 - Erin Jordahl, Sierra Club
 - Bob Libra, IDNR
 - Karen Grimes, IDNR
 - Emiley Gersema, Associated Press
 - Jack Riessen, IDNR
 - Bryan Bunton, IDNR
 - Mona Bond, AAI
 - Bob Mulqueen, Iowa State Association of Counties
 - Elizabeth Horton Plasket, Iowa Environmental Council
- 1.13 No appointments had been received and no one expressed interest in addressing the Committee during the public participation portion of the meeting.

.

- 1.14 John Lawrence discussed trends in livestock numbers in the state. Some discussion of manure handling with various types of livestock occurred. Livestock trend data was distributed to the Committee (Exhibit 2).
- 1.15 Dr. Gilchrist discussed multiple examples of antibiotic resistant strains of bacteria that have developed, stating that resistance is developing faster than new antibiotics. Thus, we face the prospect of the "post antibiotic era" when humans will die as frequently of infections as they did in the pre-antibiotic era a century ago. The resistant bacteria can be detected in groundwater around swine farms (Exhibit 3). Both animal and human use of antibiotics contribute to development of resistance. When animals are treated with lower levels of antibiotics to promote growth, development of resistance may be a factor, given that such levels do not kill the bacteria but allow them to adapt to the antibiotic by developing resistance. Dr. Gilchrist agreed to provide further information on the issue. A copy of "Detection and Occurrence of Antibiotic-Resistant Enteric Bacteria in Groundwater around Swine Farms in Eastern North Carolina," (Exhibit 3) and a copy of her power point presentation material (Exhibit 4) were distributed to the Committee.
- 1.16 Dr. Bundy, ISU, discussed various technologies for reducing odorous gases from livestock systems. The following handouts were distributed to the Committee.
 - Exhibit 5 his power point presentation
 - Exhibit 6 "Air Quality Evaluation Downwind from Swine Facilities," Bundy and Hoff, ISU
 - Exhibit 7 Emission Control Strategies for Manure Storage Facilities
 - Exhibit 8 Summary of Technologies for Odor Control
 - Exhibit 9 "Emissions from Animal Feeding Operations," draft, U.S. EPA, August 15, 2001
- Exhibit 10 "Iowa Concentrated Animal Feeding Operation Air Quality Study," ISU and U of I Study Group, February 2002
 - Exhibit 11 "Chapter 10, Emission Control Systems," Lorimor, Hoff, O'Shaughnessy, ISU
- 1.17 BREAK 15 minutes at 10:30 AM
- 1.18 ISU presentation continued. Discussion occurred regarding an ISU model for predicting odor impact areas related to prevailing wind patterns. Plan to have it available this winter. Covers and maintenance of covers were recommended for use in the matrix.
- 1.19 Jack Riessen, IDNR Water Quality Bureau Chief, discussed water body designations. His power point presentation (Exhibit 12) and "Flood Plain Mapping Issues Associated with SF 2293" (Exhibit 13) were distributed to the Committee.
- 1.110 LUNCH RECESS at 12:15 PM
- 1.111 Committee meeting resumed at 1:50 PM with IDNR presentation on Committee requested information. Various maps on soils, bedrock, watersheds, impaired water bodies, critical public areas across the state were presented (Exhibit 14). Available air quality information related to animal feeding operations was reviewed (Exhibit 15). Exhibit 16 DNR CAFO Library Documents on Best Management Practices and Modeling.
- 1.112 BREAK 15 minutes at 3:20 PM
- 1.113 John Korslund requested that Dr. Liz Wagstrom, National Pork Board, be given 5 minutes to address antibiotic resistant bacteria. The Committee agreed to allow her to so speak. She clarified that some of the antibiotics of concern are not currently being used for livestock feeding. She made some comments regarding the Scandinavian studies.
- 1.114 Minutes of the prior meeting were discussed. Some discussion of summary minutes occurred.

CONSENSUS DECISION For each exhibit the summary minutes will reflect the submitter, title, organization, title of the exhibit, and exhibit number.

CONSENSUS DECISION Alternate members will receive copies of all minutes.

The minutes were amended to reflect the exhibit presented by Susan Heathcote on the second day of the last meeting. Also, a statement was added that a discussion occurred about counties opting in or out of using the interim matrix.

Further discussion occurred about a concept of using tabled or "parking lot" issues.

CONSENSUS DECISION The minutes will reflect all tabled (parking lot) issues and consensus decisions.

Discussion occurred of whether the Committee should make a recommendation on counties opting in or out of using the matrix and, if so, how often.

The Attorney General representative advised the Committee that it was his opinion that even though using consensus there must be at the end a vote, by polling each member of the Committee, asking if the final document represents a decision that each member supports, accepts, and believes represents the best solution for the group.

1.115 Meeting adjourned at 5:10 PM to be reconvened at July 11 at 8:00 AM.

CONSENSUS DECISION SUMMARY

For each exhibit the summary minutes will reflect the submitter, title, organization, title of the exhibit, and exhibit number.

Alternate members will receive copies of all minutes.

The minutes will reflect all tabled (parking lot) issues and consensus decisions.

IDNR Master Matrix Technical Advisory Committee Urbandale, Iowa MEETING TWO July 11, 2002

SUMMARY MINUTES

- 1.20 Opening
- 1.21 Committee members and FMCS facilitators present:
 - Brent Halling, Iowa Department of Agriculture
 - Robin Pruisner, IDNR
 - Dr. Mary Gilchrist, University of Iowa (U of I)
 - John Lawrence, ISU
 - Susan Heathcote, Iowa Environmental Council
 - Harlan Hanson, Iowa State Association of Counties
 - Calvin Rozenboom, Farm Bureau
 - Aaron Heley Lehman, Iowa Farmer's Union (alternate)
 - Joe Laffoon, Iowa Poultry Association
 - John Korslund, Iowa Pork Producers Association (alternate)
 - Rosemary Haves, FMCS
 - Scot Beckenbaugh, FMCS
 - Danny Mabe, FMCS
 - Keith Norton, FMCS
 - Tim Benton, Attorney General, advisor
 - Christine Spackman, IDNR, recorder
- 1.22 Public attendees:
 - Chris Gruenhagen, Iowa Farm Bureau
 - Sherry Timmons, Iowa Department of Economic Development
 - Wendy Walker, Iowa Department of Economic Development
 - Lew Olson, Iowa House Republican Staff
 - Theresa Kehoe, Iowa Senate Democratic Staff
 - John Easter, Iowa State Association of Counties
 - Gigi Wood, Associated Press
 - Mona Bond, AAI
 - Erin Jordahl, Sierra Club
 - Michelle Meinecke, Iowa Farm Bureau
 - Karen Grimes, IDNR
- 1.23 Keith Norton, FMCS, introduced and demonstrated the Technology Assisted Group solutions (TAGs) System.
- 1.24 Discussion resumed concerning consensus calls and a committee recommendation on decisions by counties for using the matrix.

CONSENSUS DECISION The Committee recommends that the Department place in rules that counties are required to determine their use of the matrix annually for 2003, 2004, 2005, and every two years in 2007 and thereafter. The Committee members were polled individually and supported the decision.

1.25 The risk issues were reviewed. A member suggested adding under community impact sensitive populations such as nursing homes, hospitals, daycare centers. Another member suggested that

antibiotic resistant organisms also be added as a risk issue under community impact. Under economic impact a member suggested that two factors be added - local tax revenue and impact on property tax.

1.26 The Committee brain stormed ideas for tentative mitigating factors

- Separation distances facilities to all the other factors
- Monitoring system
- Enhanced construction standards
- Covers on manure storage
- Manure application rate technique
- Knifing in technique
- Manure application rate
- Secondary containment
- Filters
- Landscaping/buffer strips
- Modeling
- Permanent stock piling/composting
- Demonstrated community support
- No past violations
- Posted emergency action plan
- Closure plan
- Structure types Above ground versus in-ground storage
- Conservation practices
- Feeding systems
- Size of operation
- Quality job development
- Non-participation in pollution control property exemption
- Qualifies as homestead property exemption
- Qualifies for a family farm tax credit
- Local purchase of inputs
- Absence of antibiotic supplementation
- Adoption of environmental management system
- OSHA standards
- Public/neighbor disclosure of manure application records
- Aerate
- Timing of building flushing
- Timing of pumping
- Owner of livestock listed on manure management plan

1.27 BREAK at 9:45 AM

1.28 A committee member offered a clarification of the county matrix usage decision. The intent was annually for 2003 and 2004 and every two years thereafter. The Committee accepted the clarification.

CONSENSUS DECISION- The Committee agreed to amend their earlier consensus to read, Years 2003, 2004 annually; and 2005 and thereafter every 2 years.

- 1.29 The committee discussed various ways to categorize mitigating factors. The following were selected using the TAGs. (Exhibit 17)
 - 1. Site of facility
 - Separation distances facilities to all the other factors
 - Modeling (siting is optimized based on computerized modeling)
 - 2. Structure (storage)

- Enhanced construction standards
- Covers on manure storage
- Filters
- Secondary containment
- Landscaping/buffers
- Permanent stock piling/composting
- Structure types- above ground versus underground storage
- Aerate
- 3. Nutrient management/land application
 - Manure application technique
 - Manure application rate
 - Conservation practices
 - Separation distances facilities to all the other factors
- 4. Social/Economic impact
 - Demonstrated community support
 - Violation history
 - Size of operation
 - Quality job development
 - Non-participation in pollution control property tax exemption
 - Qualifies as homestead property exemption
 - Qualifies for a family farm tax credit
 - Local purchase of inputs
 - Absence of subtherapeutic antibiotic supplementation
 - OSHA worker protection standards
 - Public/neighbor disclosure of manure application records
 - Owner of livestock listed on manure management plan
 - Separation distances facilities to all the other factors
- 5. Operations
 - Monitoring system
 - Covers on manure storage
 - Filters
 - Landscaping/buffer strips
 - Posted emergency action plan
 - Closure plan
 - Feeding systems
 - Adoption and implementation of an environmental management system (EMS)
 - Aerate
 - Timing of building flushing
 - Timing of pumping
- 1.210 The revised minutes with the correction of U of I in all instances were approved by the Committee consensus.
- 1.211 A Committee member asked that the communications to committee members be expanded to addition staff in their organizations. After some discussion it was determined that communications would remain as decided, to just members and alternate members.
- 1.212 Scot Beckenbaugh asked the Committee to think about how it wanted to handle press releases.
- 1.213 Robin Pruisner and John Lawrence volunteered to review the material at the end of each session for typographic corrections.
- 1.214 The Committee discussed the standards for determining/selecting items for the matrix. The following were selected.

- Objective criteria
- Ouantifiable*
- Ascertainable data
- Above and beyond current statutory requirement
- Practical tool/understandable
- Feasible/doable/affordable
- Enforceable
- Valid
 - *statistically verifiable will be addressed here
 **"In question format" will be handled by IDNR when placing in rule format.
- 1.215 The Committee discussed alternatives for the next steps for it to address matrix development.
- 1.216 Scot Beckenbaugh polled the Committee for the need more information for the next meeting. It was decided that the following entities would provide either written or oral material on the following topics at the next meeting:
- OSHA U of I
- Property tax exemptions Iowa Farmers Union
- Feeding systems ISU
- EMS ISU
- Models IDNR

The respective members of this material would notify the recorder if these presentations would be oral and need to be placed on the agenda.

- 1.217 The Committee refrained from issuing a press release following this meeting.
- 1.218 The Agenda for the next meeting will include the 30-minute public participation, the Committee informational items, TAGs and prioritizing/ranking the mitigating factors.
- 1.219 Meeting and session adjourned at 4:10 PM.

Attachments:

- Exhibit 2 Livestock trend data, presented by John Lawrence, ISU Committee member
- Exhibit 3 "Detection and Occurrence of Antibiotic-Resistant Enteric Bacteria in Groundwater around Swine Farms in Eastern North Carolina," Anderson, Maren and Sobsey, Mark, Department of Environmental Science & Engineering, School of Public Health, University of North Carolina as presented a May 22, 2002, meeting of the American Society for Microbiology.
- Exhibit 4 Dr. Mary Gilchrist's power point presentation
- Exhibit 5 Dr. Dwaine Bundy's power point presentation
- Exhibit 6 "Air Quality Evaluation Downwind from Swine Facilities," Bundy, Dwaine and Hoff, Steven, Department of Agricultural and Biosystems Engineering, ISU, as presented at the April 12, 2002, ASAE Mid-Central meeting, presented by Dr Bundy, ISU
- Exhibit 7 Emission Control Strategies for Manure Storage Facilities, presented by Dr. Bundy, ISU
- Exhibit 8 Summary of Technologies for Odor Control, presented by Dr. Bundy, ISU

Exhibit 9 – "Emissions from Animal Feeding Operations," draft, U.S. EPA, August 15, 2001, presented by Dr. Bundy, ISU

Exhibit 10 – "Iowa Concentrated Animal Feeding Operation Air Quality Study," ISU and U of I Study Group, February 2002, presented by Dr. Bundy, ISU

Exhibit 11- "Chapter 10, Emission Control Systems," Lorimor, Hoff, O'Shaughnessy, ISU, presented by Dr. Bundy, ISU

Exhibit 12 – Jack Riessen's power point presentation

Exhibit 13 - "Flood Plain Mapping Issues Associated with SF 2293," presented by Jack Riessen, IDNR

Exhibit 14 - Various maps on soils, bedrock, watersheds, impaired water bodies, critical public areas across the state, presented by Bob Libra, IDNR

Exhibit 15 - Available air quality information related to animal feeding operations, presented by Bryan Bunton, IDNR

Exhibit 16 – DNR CAFO Library Documents on Best Management Practices and Modeling, presented by Bryan Bunton, IDNR

Exhibit 17 – FMCS Electronic Flip Chart for Mitigating Factors-

CONSENSUS DECISION SUMMARY

The Committee recommends that the Department place in rules that counties are required to determine their use of the matrix annually for 2003, 2004, 2005, and every two years in 2007 and thereafter.

The Committee agreed to amend their earlier consensus to read, Years 2003, 2004 annually; and 2005 and thereafter every 2 years.

From 7/10/02

For each exhibit the summary minutes will reflect the submitter, title, organization, title of the exhibit, and exhibit number.

Alternate members will receive copies of all minutes.

The minutes will reflect all tabled (parking lot) issues and consensus decisions.